

1. An apparatus for dispensing liquid material, comprising:
a dispensing module including a liquid supply passage adapted to be in fluid communication with a supply of liquid material, and an air supply passage adapted to be in fluid communication with a source of
5 pressurized air;
a nozzle operatively coupled to said dispensing module and comprising a liquid discharge passage in fluid communication with said liquid supply passage, and an air discharge passage in fluid communication with said air supply passage, said liquid discharge passage having a liquid
10 discharge outlet for discharging the liquid material, said air discharge passage having an air outlet configured to direct the pressurized air generally toward the liquid material discharged from said liquid discharge outlet;
an air valve operatively coupled to said air discharge passage
15 and operable to selectively direct the pressurized air to said air outlet; and
a controller coupled with said air valve and configured to vary the pressure of the pressurized air discharging from said air outlet as the liquid material is discharged to move the liquid material discharging from said liquid discharge outlet in a desired pattern.
2. The liquid dispenser of claim 1, wherein said controller controls the air valve to move the liquid material discharging from said liquid discharge outlet in an oscillating pattern.

3. The liquid dispenser of claim 1, wherein said controller is configured to operate the air valve to pulse the air discharged from said air outlet to thereby move the liquid material in the desired pattern.
4. The liquid dispenser of claim 3, wherein said controller is configured to operate the air valve such that the air discharged from said air outlet is pulsed at a rate of approximately 500 cycles per second to approximately 2000 cycles per second.
5. The liquid dispenser of claim 3, wherein said air valve includes an open position and a closed position, and said controller is configured to actuate said air valve between said open and closed positions.
6. The liquid dispenser of claim 3, wherein said air valve includes an open position, a closed position and an intermediate position between said open and closed positions and said controller is configured to actuate said air valve between one of said open and closed positions and said
5 intermediate position.
7. The liquid dispenser of claim 1, further comprising:
a hot air manifold coupled to said dispensing module for heating the pressurized air supplied to said nozzle, said air valve positioned between said hot air manifold and said nozzle.

8. The liquid dispenser of claim 7, wherein said hot air manifold comprises a flat heater operable to transfer heat to the air supplied to said nozzle.

9. An apparatus for dispensing liquid material, comprising:
a dispensing module including a liquid supply passage adapted
to be in fluid communication with a supply of liquid material, and an air
supply passage adapted to be in fluid communication with a source of
5 pressurized air;
a nozzle operatively coupled to said dispensing module and
comprising first and second liquid discharge passages in fluid
communication with said liquid supply passage, and an air discharge
passage in fluid communication with said air supply passage, said first and
10 second liquid discharge passages having respective first and second liquid
discharge outlets for discharging the liquid material, said air discharge
passage having an air outlet positioned between said first and second liquid
discharge outlets and configured to direct the pressurized air generally
toward the liquid material discharged from said first and second liquid
15 discharge outlets; and
an air valve operatively coupled to said air discharge passage
and operable to selectively direct the pressurized air to said air outlet, and
a controller coupled with said air valve and configured to vary
the pressure of the pressurized air discharging from said air outlet as the
20 liquid material is discharged to move the liquid material discharging from
said liquid discharge outlet in a desired pattern.

10. A method of dispensing liquid material from a nozzle having liquid discharge outlet and an air outlet, the method comprising:
- dispensing liquid material from the liquid discharge outlet;
 - discharging a stream of pressurized air from the air outlet
- 5 toward the dispensing liquid material; and
- varying the pressure of the discharging pressurized air while dispensing the liquid material to cause the liquid material to move in a desired pattern.
11. The method of claim 10, further comprising:
- varying the pressure of the discharging pressurized air to cause an oscillating pattern in the discharging liquid material.
12. The method of claim 10, wherein varying the pressure of the pressurized air further comprises pulsing the pressurized air.
13. The method of claim 12, wherein pulsing the pressurized air further comprises pulsing the air at a rate of approximately 500 cycles per second to approximately 2000 cycles per second.